STRONG
DIGITAL TV

Immagine simile

Digital Free-To-Air Terrestrial Receiver SRT 5016
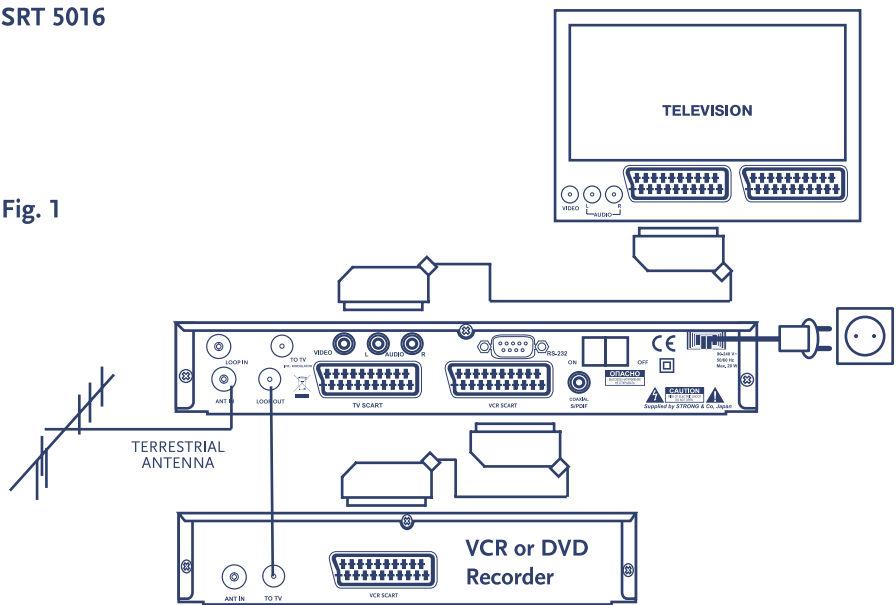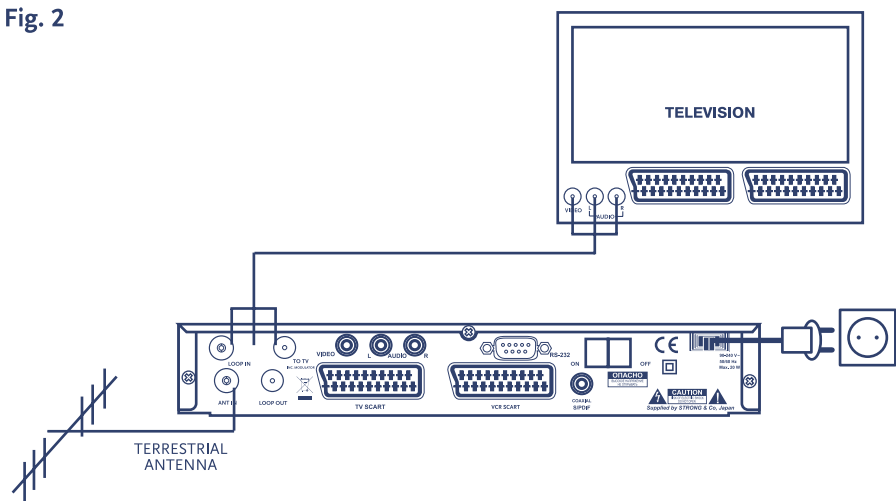
User Manual

SRT 5016

Fig. 1

TERRESTRIAL
ANTENNA

VCR or DVD
Recorder

Fig. 2

TERRESTRIAL
ANTENNA

Fig. 3

DIGITAL
Audio Amplifier

Fig. 4

COMPUTER

Fig. 5

2 3 1 4

Fig. 6

3 4 8 7 10 11

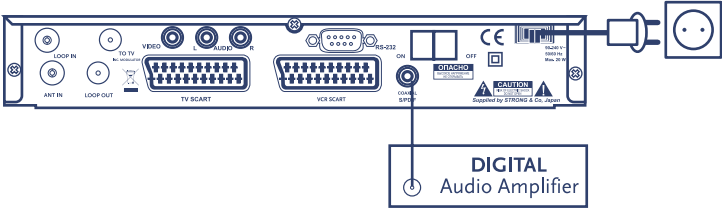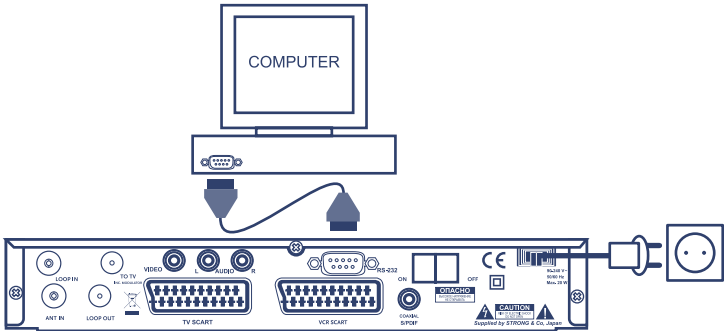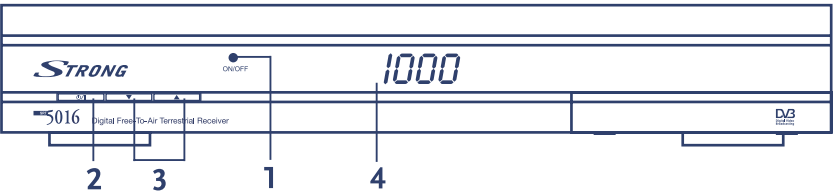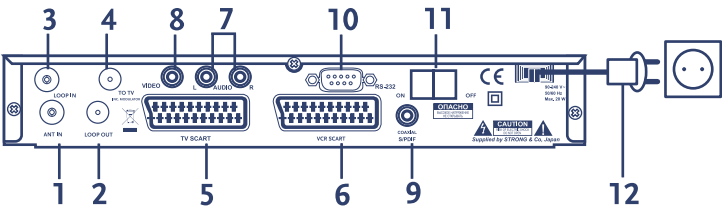1 2 5 6 9 12

ENVIRONMENTAL ISSUES

Strong is committed to reducing the impact of its products on the environment.

Electronic product recycling

Do not dispose of this product with your domestic rubbish.

At the end of its useful life, this product contains materials which when processed correctly can be recovered and recycled. By participating in the responsible recycling of this product you will be reducing the requirement for new raw materials and reducing the amount of material that would otherwise end up in landfill. When you purchase a new, similar product your retailer may offer to take this old one off you. Alternatively, you can take it to your local recycling centre. Your retailer or local municipal authority will advise you of the collection facilities available for waste electronically products in your area. User of this service will be free to you.

Within the scope of the European legislation on Waste Electrical and Electronic Equipment (Directive 2002/96/EC valid as of August 2005) STRONG provides a recycling system free of charge for consumers to returning products after end of life. For more information about

Packaging

When disposing of this product packaging, please ensure that it is recycled. Packaging material is to be depolluted in waste separation.

Power Saving

To save power and money, please put the product into standby mode when not in use. We also recommend disconnection from mains supply when not in use for longer periods of time.

Batteries

Do not dispose of the batteries from your handset with your domestic waste.

Where they are available,

Alternations reserved 07/2007

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English

HOTLINE
📞 **0180 500 75 43**✳
✳ €0.14/Min. from German wired line
📞 **0820 400 150**✳
✳ €0.12/Min. from Austrian wired line

per January 2007

1.0 INSTRUCTION

1.1 Safety Instructions

DO NOT INSTALL YOUR RECEIVER:

- In a closed or poorly ventilated cabinet; directly on top of or under any another equipment; on a surface which might obstruct the ventilation slots

DO NOT EXPOSE THE RECEIVER OR ITS ACCESSORIES:

- To direct sunlight or near any other equipment that generates heat; to rain or intense moisture; to intense vibration and to any shock which may cause permanent damage to your receiver or to any magnetic objects, such as loudspeakers, transformers, etc.
- Do not use a damaged power cord. It may cause a fire or an electrical shock. Do not touch a power cord with wet hands. It may cause an electric shock.
- Never open the cover. It is dangerous to touch the inside of the receiver due to high voltage currents and possible electrical hazards. Your warranty will be void if the receiver has been opened.
- When the receiver is not used for a long period of time, you should unplug the power cord from the wall socket.
- Do not use alcohol or ammonia based liquids to clean the receiver. If you wish, you may clean your receiver with a soft lint-free cloth slightly made damp with a mild soap solution, only after disconnecting from the mains voltage supply. Make sure no foreign objects fall through the ventilation slots because this could cause fire or an electric shock.
- Do not place any objects on top of the receiver because this might prevent proper cooling of the components inside.

Safety Precautions

- Do not open the receiver cover, as you will be exposed to a shock hazard. It will also void your warranty. Refer all maintenance or servicing to suitably qualified personnel
- When you are connecting the cables, be sure that the receiver is disconnected from the mains supply voltage. Wait a few seconds after switching off the receiver before you move the receiver or disconnect any equipment.
- It is a necessity that you only use an approved extension and compatible wiring that is suitable for the electrical power consumption of the installed equipment. Please ensure that the electrical power supply corresponds with the voltage on the electrical identification plate at the back of the receiver.

If the receiver does not operate normal even after strictly following the instructions of this user manual, it is recommended to consult your dealer.

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1.2 Storage

Your receiver and its accessories are stored and delivered in a packaging, protected against electric damage and moisture. When unpacking, make sure all parts are included. Keep packaging away from children. For transportation from one place to another or if you are returning the receiver under warranty make sure it is repacked in its original packaging with all accessories. Failing to comply with such packaging procedures could void your warranty.

1.3 Equipment Set-up

We recommend you consult a professional installer to set up your equipment. Otherwise, please follow these instructions carefully:
- Refer to the user manual of your TV and your antenna
- Make sure that the SCART cable and outdoor components of the antenna are in a good condition and the SCART connections are well shielded

This manual provides complete instructions for installing and using this receiver.
The following symbols will serve as follow:

Warning   Indicates warning information.

Tips   Indicates any other additional important or helpful information.

MENU   Represents a button on the remote control or the receiver
(Bold Character)

Move to   Represents a menu item within a window.
(Italic Character)

1.4 Features & Accessories

- For all digital Free-To-Air TV and Radio programmes (with outdoor or indoor terrestrial antenna)[1]
- DVB-T compliant, Digital UHF/ VHF Tuner with Loop-through function
- Set-up support for first time installation
- Quick and easy installation & user-friendly menu
- Multilingual OSD on screen display menu
- Excellent Audio and Video quality
- Digital audio output through coaxial S/PDIF
- Automatic and manual channel scan options
- Support of active antenna by 5V output
- Support of channel numbering defined by broadcaster
- 1000 channels memory capacity
- Favourite list for TV and Radio
- Parental lock function for menu, selectable per channel
- Electronic Program Guide (EPG) for present / following event information and up to 7 days for on screen programme information
- 3 Operation Modes (Digital TV, Digital Radio, Favourite)
- Support of Teletext (OSD & VBI)
- Multi-lingual subtitling and audio track support
- 2 SCART connectors (TV and VCR)
- 3 RCA connectors (Video, Audio Left and Right)
- Mosaic function: 9 TV Channels in overview
- Automatic clock change: summer/winter time [1]
- Timer programmable via EPG
- NTSC/PAL identification and converting automatically and manually
- Built-in UHF modulator
- RS 232 port for updating control software and additional services

[1] subject of local broadcast condition

Accessories:

- User's Manual
- 1 Remote control unit
- 2x Batteries (AAA type)

<u>Note</u>:   The batteries should not be recharged, disassembled, electrically short-circuited or be mixed or used with other types of batteries.

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2.0 CONNECTION

2.1 Connecting to Terrestrial Antenna

To receive the broadcast signal, the terrestrial antenna cable should be connected to the ANT IN connector at the back of the receiver. (FIGURE 1)

2.2 Connecting to TV and VCR with SCART cable

The TV set should be connected with the receiver through a SCART cable (fig. 1). This terrestrial receiver may also be operated together with a VCR using the loop through function. The loop-through function of this terrestrial receiver is active when the receiver is powered off. As soon as the VCR is turned on, its video and audio signals are looped through the terrestrial receiver.

Optional 1: using coaxial cable, connect TO TV output of the receiver to terrestrial input of your TV set. This will allow you to watch digital programs from your receiver on an analogue TV set.

Optional 2: using coaxial cable, connect TO TV output of the receiver to terrestrial input of your VCR and terrestrial output of VCR to terrestrial input of your TV set. This will allow you to record the digital program you are watching.

Optional 3: using coaxial cable, connect TO TV output of the receiver to aerial input of your VCR and terrestrial output of VCR to terrestrial input of your TV set. Using a short loop coaxial cable, connect LOOP OUT output to LOOP IN input at the back of your receiver. This allows you to watch and record analogue and digital terrestrial programs on your VCR.

2.3 Connecting to TV with RCA cable

On the back of your receiver you will find the RCA connectors (Audio Left & Right - Red& white, Video - Yellow). Install an audio/video cable between the RCA connectors of the receiver and those of your TV set or amplifier (fig. 2).

2.4 Connecting to a Digital Audio Amplifier

The Digital Audio Amplifier is connected with the receiver from the S/PDIF connector (fig. 3)

2.5 Connecting to PC

The RS-232 connector on the receiver is to connect to the PC using a serial cable (fig. 4). This allows you to download new versions of software to your receiver.

3.0 YOUR RECEIVER

3.1 Front Panel

1. **|Mode indicator**
   The RED light indicates that the receiver is in STAND-BY mode. The GREEN light indicates that the receiver is in AWAKE mode.

2. **Power ON/OFF button**

3. **Up/Down buttons**

4. **4 digits display**
   In STAND-BY mode indicates current time
   In AWAKE mode indicates current channel number

3.2 Rear Panel

1. **ANT IN**
   To connect a digital aerial antenna for receiving broadcasting signal.
2. **LOOP OUT**
   If you want to use loop trough connect this output to LOOP IN connector.
3. **LOOP IN**
   Input modulator.
4. **TO TV (incl. modulator)**
   Connect this output to terrestrial input of your TV set. This connection will allow you to watch analogue terrestrial programs, as well as to use the built-in modulator.
5. **TV SCART Connector**
   To connect your receiver with your TV set using a SCART cable.
6. **VCR SCART Connector**
   To connect your receiver with your VCR using a SCART cable.
7. **AUDIO Right (Red RCA) and Left (White RCA)**
   These connectors give you the possibility to connect the audio signal to an external amplifier or to the audio input of your TV.
8. **VIDEO (YELLOW RCA)**
   This connector has a constant video signal for connection to TV set without SCART connector or to VCR.
9. **Coax S/PDIF (BLACK RCA)**
   To connect your receiver to digital audio amplifier
10. **RS-232 Serial Port**
   Connect a PC to your receiver to download new software versions.

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11. **Main power switch**

12. **Power Cord**

Your receiver requires a current of 90 ~ 240 V AC (Auto-selectable), 50 ~ 60 Hz +/-5%. Make sure to check the power specification before connecting your receiver to the wall outlet.

3.3 Remote Control

⏻	Turns the receiver On/Standby
🔇	Mutes audio output of the receiver
AV	Toggle between TV and AV mode
0 ~ 9	Channel selection
FAV	Toggle Favourite mode ON / OFF
TV/R	Toggle between TV or RADIO mode
MENU	Opens the main menu
INFO	Shows information of the current channel
EPG	Shows the EPG (Electronic Program Guide) during No-menu state only
EXIT	Exits from the menu or sub-menu and cancels the progressing function if applicable
▲▼	Menu Off: Change the current program to the previous/next program
	Menu On: Moves the cursor up/down
◄►	Menu Off: Increases/decreases the volume level
	Menu On: Change the setting values in specific Menu item
OK	Activates the highlighted menu item. Displays a channel list according to TV / Radio Mode
V+ / V-	Use to increase or decrease the receiver volume level
P+ / P-	Page up and down in menu list
MOSAIC	Show pictures of 9 channels on the screen
PAUSE	Freeze/Resume picture
AUDIO	Shows list of available audio languages for the channel you are watching. In addition it sets the current channel audio to stereo ((•)), left-mono ((• or right-mono •))
EDIT	Program edit
TEXT	Shows current service's Teletext on OSD (On Screen Display)
SUB	Show list of subtitled languages current channel is supporting
RCL	Switches back to previous channel

4.0 FIRST TIME INSTALLATION

Make sure your terrestrial receiver is connected correctly to your TV and terrestrial antenna and the signal quality is good enough. Confirm the power plug of the receiver is plugged into the wall outlet. Turn on the receiver.

It is recommended to perform the first time installation following the Installation Wizard step by step. This will help you to easily achieve system configuration and channel installation. If you are a professional installer then you can skip the wizard by pressing **EXIT** button and set-up the channels using the *Channel Search* menu.

1 You are asked to *Select a Language* out of the list.
   Press **UP**/**DOWN** to choose your language, press **OK** to confirm.

2 The *Preference Menu* will appear.
   Please select your *Country*, *Antenna Power mode* and *Channel numbering*. Press **UP**/**DOWN** to select the items, press **RIGHT**/**LEFT** to change the value of the item. If you choose **BACK**, it will go back to the previous menu screen. Press **OK** to confirm.

3 You enter the *Adjust antenna* menu.
   Press **LEFT**/**RIGHT** to select *Channel No*, adjust your antenna direction and position (if necessary) to get maximum levels on the signal level and quality indicators. You can check with your dealer on which channels digital terrestrial broadcast is available at your location.

Move cursor to *Scan*, press **OK** to confirm, The *Automatic Search* screen will appear. On completing the search, the receiver will save services information automatically and exit to normal play state.

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5.0 MAIN MENU

All the important settings and features of your receiver can be operated in *Main Menu*. With Menu off, press **MENU** key. The *MAIN MENU* screen will appear. It consists of five sub-menus: "*Channel Organiser*", "*Channel Search*", "*Installation*", "*Timer*" and "*Game*".

5.1 Channel Organiser

In *MAIN MENU* screen, press **UP**/**DOWN** to move the cursor to *Channel Organiser*, and press **OK** to enter the *Channel Organiser menu*.

The *Channel Organiser menu* consists of three sub-menus: "*Edit TV Channel*", "*Edit Radio Channel*" and "*Sort*".

5.1.1 Edit TV channel
In this menu, you can set the favourite channels, change the order of the channels and delete channels.
Press **UP**/**DOWN** keys to point the focus of the menu to the channel of your selection. Press **LEFT**/**RIGHT** keys to point the focus of the menu to the column with the function, which you want to apply to the selected channel. When the focus is on column "*Favour*", press **OK** to add the selected channel to the Favourite list.
When the focus is on column "*Move*", press **OK** to confirm channel selection. Using **UP**/**DOWN** moves the channel to the new location and press **OK** to confirm. Repeat this for every channel you want to move.
When the focus is on column "*Del*", press **OK** to mark the channel to be deleted from the list. To apply changes, press **EXIT** and confirm channel deletion.

5.1.2 Edit Radio Channels
This menu is similar to 5.1.1 "Edit TV Channels" description.

5.1.3 Sort
You can sort the order of the channel list by *Channel Name, LCN (Logical Channel Number)* or *Channel Number*.

5.2 Channel Search

There are 2 items in the *Channel Search* menu: *Automatic Search* and *Manual Search*.

5.2.1 Automatic Search

Press **OK** over the *Automatic Search*.
The warning message "*Do you want to start Automatic Search?*" will appear. Press **LEFT**/**RIGHT** to move the cursor and **OK** to continue. The message "*Do you want to erase your previous channel list?*" will appear. Please press **LEFT**/**RIGHT** to choose whether to erase your previous channel list.. If you want to cancel channel search press the **EXIT** button.
On completing the search, the receiver will save automatically the services information and exit to normal play state.

5.2.2 Manual Search

Press **OK** over the *Manual Search*, the Manual Search screen will appear.
Press **LEFT**/**RIGHT** to choose channel No. or press numerical buttons to input channel number. Check indicators of the signal level and quality to make sure the values are entered correctly. Press **UP**/**DOWN** to move cursor to *Search* and press **OK** to search current channel. If no service is installed, there will be the warning "*No Signal*". Press any key to return.

Tips   Different countries have different VHF/UHF frequency plans. It is important to select the proper country.

5.3 Installation

5.3.1 System Setting

In this menu, you can configure the system settings *Language*, *TV Settings*, *Country*, *Channel Numbering*, *Antenna Power*, *Time Settings*, and *Factory Default*.

5.3.1.1 Language

You can change the language of the OSD and Audio.
Press **UP**/**DOWN** to select the *OSD Language* or *Audio language*.
Press **OK**/Right to enter the language list and Press **UP**/**DOWN** to select the language. Press **OK** to confirm.

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5.3.1.2 TV Settings

You can set *TV Standard*, *TV Format* and *Video Output*.

- TV Standard
  Press **OK**/**RIGHT** to select *PAL* or *NTSC* and **OK** to confirm. If you don't know which standard your TV has, please select *AUTO*.
- TV Format
  Press **OK**/**RIGHT** to select *4:3* or *16:9*, and **OK** to confirm.

- Video Output
  Press **OK**/**RIGHT** to select *CVBS* or *RGB*, and **OK** to confirm

- Modulator setting
  Use **UP**/**DOWN** to select RF Audio mode or RF channel.
  Use **LEFT**/**RIGHT** to change settings.
  Press **OK** to confirm settings or **EXIT** to cancel.

5.3.1.3 Country

Press **OK**/**RIGHT** to select your country, press **OK** to confirm. If your country is not in the list, select *Other*. It will apply the most common frequency plan for European countries.

5.3.1.4 Channel Numbering

Here you can set the channel list by different number format: *Appearing order* or *Operator defined*.

5.3.1.5 Antenna Power

Press **OK**/**RIGHT** to select turn *OFF* or *ON* the antenna power, press **OK** to confirm. Before setting the Antenna Power to *ON*: make sure your antenna is ACTIVE, requires power 5 V DC and it's power consumption is not more then 100 mA.

5.3.1.6 Time Settings

If a broadcaster provides GMT, you can set the time using GMT, or set time by yourself.

If the GMT usage is *ON* then the Current time is set automatically or you can set the time zone. If your broadcaster provides the correct time offset then your receiver will change from summertime to wintertime automatically.

If you set GMT Usage to *OFF*, *Set Data* and *Set Time* item are displayed. To set the time value manually, move the cursor to the time item and use the numeric buttons on the remote control.

5.3.1.7 Factory Default

Select *Factory default* and press **OK**. Select *YES* and for the warning "Do you want to set factory default?" press **OK**, then the receiver will return to its factory default state, and all user data will be deleted.

5.3.2 Personal Style
In this menu, you can set the *Menu Colour*, *Transparency Level*, *Border Pattern* and *Entry Animation*.

Press **UP**/**DOWN** to select the item, and Press **LEFT**/**RIGHT** to set the value and **OK** to confirm.

5.3.3 Parental Control
In this menu, you can set *Channel Lock* status (*ON* or *OFF*), the *Menu Lock* status, *Parental Setting* and change the *PIN Code*.
The default PIN code is **0000**.

5.3.3.1 Channel Lock
Set the system *Channel Lock* to *ON* or *OFF*. If the channel lock is ON, the parental PIN code has to be entered correctly before watching the locked channel.

5.3.3.2 Menu Lock
Press *YES* or *NO*, whether you want to lock the Menu or not and press **OK** to confirm. If the menu lock is on, you need to enter your PIN for operations such as search program and set
factory default.

5.3.3.3 Parental Setting
Set some programs to lock status. If a program is locked, the parental PIN code has to be entered correctly before watching the locked program. Use **UP**/**DOWN** keys to select the channel you want to lock and press **OK** to confirm.

5.3.3.4 Change PIN
PIN is Personal Identification Number. To modify the password, you need to enter the current PIN, a new 4 digit password and once again the new one for confirmation; the system password will be changed then.

5.3.4 System Information
Displays the software version information. Press **OK**/**EXIT** keys to return.

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5.3.5 System Update

5.3.5.1 Update from Receiver to Receiver

You use this menu to update software from receiver to receiver. The System Update screen will appear. When it is necessary to update the System, please follow these steps:

1. First power off both receiver, connect them with cross RS-232.
2. Then power on master receiver (master is receiver from which you will copy software) and keep slave receiver off. Navigate in the menu of master receiver and select "*System Update – STB to STB*".
3. When the status displays "detecting slave STB", power on slave STB, after the master STB detects the slave, the master starts transmission and burns.
4. While transmitting and burning, it is very important to avoid other operations such as power off because this may cause destruction of the data in the FLASH memory and the receiver will need to be repaired.
5. When update is complete, first power off both STBs, then disconnect the RS-232 line.

Tips   System Update just updates the software. The programs database will not be updated.

5.3.5.2 Update through PC to STB

1. Connect Computer to receiver (receiver must be power off) with a 9-pin cross cable (two females).
2. The computer will follow the steps below:
   Start -> Programs -> Accessories -> Communications -> Hyper terminal
   Then choose "*COM1*" or "*COM2*" according to which port you are using in the computer and port setting as follows:

Bits per Second:	115200
Data bits:	8
Parity:	None
Stop bits:	1
Flow Control:	None

3. In Hyper Terminal menu select "transfer" item and then press "send file" item. Select the file with the new software (***.UPD**) you want to download and choose the protocol "1K X modem". Finally press ok and a download menu will appear in the computer screen. Power on the receiver, then the download process will begin.
4. After about 2.5 minutes, the message "OK, Reset" will appear on the computer on Hyper Terminal window, which means the download has completed successfully.
5. Power off the receiver and then unplug the RS-232 interface.

NOTE: INCORRECT OPERATION MAY CAUSE UNREPAIRABLE DAMAGE TO THE RECEIVER.

1. DO NOT POWER OFF THE RECEIVER DURING THE PROCESS OF DOWNLOADING.
2. DO NOT PLUG IN OR UNPLUG THE RS-232 INTERFACE WHEN RECEIVER IS POWERED ON.

5.4 Timer

You can set the timer to make the receiver perform designated actions including timer based wake up/sleep the set-top-box.

Use **UP**/**DOWN** buttons to select timer. Press **LEFT**/**RIGHT** to activate/switch off current timer. Press **OK** to enter selected timer settings.

You can select from the following functions:

"*Power On*": The receiver powers on at the designated date and time.
"*Time interval*": The receiver switches on at the designated date and time, displays the channel and then switches off at the designated date and time (The value set at the end time).
"*Power Off*": The receiver powers off at the designated date and time.
Cycle: You can set the cycle of the action designated in the timer mode (one time, Daily or Weekly).
Start Date: You can set the start date of the timer action.
Start Time: You can set the start time of the timer action.
End Time: You can set the end time of the channel view when the Timer mode is on Time Interval.
Channel Type: Select between *TV* and *Radio*.
Channel Name: Press **RIGHT** button to display channel list and using navigation buttons select channel to be shown when the receiver will power on by timer.

5.5 Game

The receiver has a calendar and three games (Mine, Tetris and Gomoku). Select a game and press **OK** for playing. Or you can press **GAME** key on normal play state to enter the game menu directly.

5.5.1 Mine
UP / **DOWN** / **LEFT** / **RIGHT**: Move the cursor.
MENU button: To mark the mine.

5.5.2 Tetris
LEFT / **RIGHT**: Move block to left or right direction.
DOWN: Drop block.
UP: Rotate block.

5.5.3 Gomoku
UP / **DOWN** / **LEFT** / **RIGHT**: Move the cursor.
OK: Place the gobang.

5.5.4 Calendar
UP / **DOWN**: +/- months.
LEFT / **RIGHT**: +/- years the range from 1900 to 2100.

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6.0 OTHER OPERATIONS

6.1 Mosaic

In no-menu state, press **MOSAIC** button. Screen will be divided into nine pictures.

Press **UP** / **DOWN**/ **LEFT** / **RIGHT** keys to choose one of current programs.
Press **P+** / **P-** keys to view another nine programs.
Press **OK** key to return to normal play state and play the selected program.
Press **EXIT** key to return normal play state and change nothing.

6.2 EPG

EPG (Electronic Program Guide) is transmitted by broadcasters to display information about program content. In no-menu state, press **EPG**, *EPG Menu* will appear:
Press **UP** / **DOWN** to choose channel. Press **RIGHT** to enter EPG schedules of current channel.

1. In *EPG schedules menu*:
   Press **UP** / **DOWN** keys to choose schedule items. Press **P+** / **P-** into next / previous day schedules. Press **LEFT**/**EXIT** return to *EPG Menu*. Press **OK**/**RIGHT** to show the details of this item.
2. In *EPG schedule details*:
   Press **P+** / **P-** into next / previous page. Press **LEFT**/**EXIT** return to *EPG schedule Menu*. You can set up the event timer by pressing **OK** in *EPG schedule details* or *EPG schedule* screen.
3. To set up an event timer:
   Press **UP**/**DOWN** to move the cursor to the event for which you want to add a timer. Press **OK** to add a timer. To quit event timer setup, press **EXIT**.

6.3 Teletext

In no-menu state, press **TEXT**. Press **UP** / **DOWN** to move up or down from the displayed page number. Press Numeric keys to input page directly. If the current program has no Teletext, you'll see the message "*Teletext no data – Press any key to exit*".

6.4 Subtitles

In no-menu state, press **SUB**. Press **LEFT**/**RIGHT** to select between teletext and DVB subtitles. Use **UP**/**DOWN** to select subtitles language. Confirm your selection with **OK** button.

6.5 Information

When you press **INFO** key twice in the no-menu state, the screen will show you current channel information.

A.1 TROUBLESHOOTING

Before requesting service, please check the table for a possible cause of the problem. Some simple checks or minor adjustments may restore proper operation. The most common problems are related to cable connections, please disconnect and connect all cables again. If none of the below indicated remedies solve the problem, consult your vendor.

Symptom	Remedy
Installation	
Decoder does not find channels.	If you are using a directional aerial, make sure it is directed towards a digital TV transmitter and positioned correctly
	Make sure it is possible to receive digital terrestrial signal in your area
	It is advisable to use a standard outdoor aerial, which normally have better specifications than an indoor one
	Check the cable of the aerial
	If you cannot solve the problem easily have your aerial and installation tested by a professional
General	
Standby indicator on front panel does not light up	Check if power is available at the wall socket. Check if the SCART cable and antenna cable are correctly connected and the receiver is switched on. Disconnect these cables, and reconnect them to ensure they are in place
Standby indicator on front panel is red	Your receiver is in standby, press the power button on your remote control
Remote control fails to operate receiver	Check the batteries in your remote control. Make sure your receiver is in the operate mode. Make sure you are pointing your remote control at the receiver's front panel
	Make sure there is no direct sunlight from behind the receiver
	There may be a temporary transmission error, or your receiver has lost some of its software settings. Switch off your receiver at the power source and switch it on again after a few seconds
No program broadcast recorded on VCR	Check the connection between receiver and VCR. Please make sure your VCR is set properly

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Symptom	Remedy
Electronic Program Guide (EPG)	
EPG empty	The selected program does not support EPG. The local time is incorrect. Set the correct local time
Audio & video issues	
TV Picture changes colour	This may happen after a power-cut or disconnection from the power source. Your receiver has lost some software settings. Switch off your receiver and on again after a few seconds. If the problem persists, contact your vendor
Blocks in the TV picture	The signal is too weak or defective due to e.g. bad weather conditions. Try to adjust your aerial position or wait for the signal to be re-established

A.2 SPECIFICATIONS

Demodulator
Demodulator: COFDM; 16 QAM / 64 QAM
Transmission mode: 2 K ~ 8 K

Video Decoder
Profile level: MPEG2 MP@ML
Video resolution: 720 x 576 pixels (PAL), 720 x 480 (NTSC)
Decoding & Video Out: PAL & NTSC
Aspect ratio: 4:3, 16:9

Audio Decoder
MPEG MusiCam Layer I & II
Sampling rate: 32, 44.1, 48 kHz
Audio mode: Stereo, Joint Stereo, Dual Mono, Mono

Tuner
Front End: DVB-T, UHF & VHF Tuner
Input frequency range: 47 ~ 470 MHz (VHF I/III) and 470 ~ 862 MHz (UHF)
Loop through frequency range: 47 ~ 862 MHz
Input signal level: -82 ~ -20 dBm

RF Modulator
Channels: 21 ~ 69 (for TV without Scart)
Output: PAL B/G, I, D/K, M/N

Memory and System
Flash memory: 8 Mbits
SDRAM: 64 Mbits

Connectors
ANT input: IEC Female
Loop out: IEC Male
Loop in: IEC Female
TO TV: IEC Male
TV SCART: supports RGB, CVBS, Audio Left/Right Output with Volume Control
VCR SCART: supports CVBS, Audio Left/Right Output with Volume control
3 RCA for Video (Yellow), Audio Left/Right (White/Red)
Coax S/PDIF (Black)
Data Interface- serial port: RS-232, 9-Pin D-Sub Male type

General Data

Supply Voltage:	90 ~ 240 V AC (SMPS), 50/60 Hz
Power Consumption (max):	20 W
Standby Power Consumption:	< 10 W
Operating Temperature:	0 °C ~ 40 °C
Storage Temperature:	-30 °C ~ 80 °C
Operating Humidity Range:	10 ~ 85 %, RH, Non-condensing
Net-weight:	1.2 kg
Size (W x D x H) in mm:	260 x 210 x 40

A.3 GLOSSARY OF TERMS

DVB-T	Digital Video Broadcasting Terrestrial – Digital TV via antenna (same as DTT- Digital Terrestrial Television).
MPEG	Moving Picture Experts Group is founded by the ISO. MPEG is a standard method for digital transmission of video and audio.
Network	Also known as bouquet is a set of channels offered by a single broadcaster.
PAL	Phase Alternate Line colour system adopted by European broadcasters.
PID	The transmitted packages have identifiers (PID) telling the receiver what to do with the received information. Receivers normally use four types of PID, these are V-PID (video PID), A-PID (audio PID), P-PID (Program PID) and data PID (EPG information).
RS-232	Serial data port.